

STATEMENT OF CONSIDERATIONS

REQUEST BY CREE LIGHTING COMPANY, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-00NT40985 W(A)-01-002, CH-1055

The Petitioner, Cree Lighting Company, (Cree) , was awarded this cooperative agreement for the performance of work entitled, "Energy Efficient Solid State Lamp". The purpose of the cooperative agreement is to develop high efficiency, high radiance light emitting diode (LED) chip and packaging technology that is expected to lead to novel solid state lamps capable of replacing less energy efficient incandescent and halogen reflector lamps. When compared with current incandescent reflector lamps, this revolutionary new lamp is expected to be three times more efficient, have at least ten times the rated life, and greater performance properties. Lawrence Berkeley National Laboratory (LBNL) is a subcontractor to Cree under this cooperative agreement, but the waiver is only for inventions of Cree.¹

The total estimated cost of the cooperative agreement is \$2,997,250, with the DOE share being \$2,247,250. Cost sharing of the project for Cree is \$750,000, or about 25%. The planned performance period is September 30, 2000 through September 30, 2003.

In its response to questions 4 and 5 of the attached waiver petition, Cree has shown its technical competence in the development of gallium nitride (GaN) based LEDs. Cree has demonstrated world record performance of near UV LEDs in research and development. This packaged LED has quantum efficiency of 25% on a total light output of fifteen mW. Cree has also made advances in blue and green LEDs that are being incorporated into numerous lighting applications that were recently handled through traditional illumination methods. According to its annual report for the year 2000, attached hereto, Cree's R&D has led to technological applications in the automotive, wireless telephone, and indoor and outdoor video screen markets. Currently, Cree has eight pending patent applications for this technology. Cree's response fully demonstrates its technical competence in the field of energy efficient solid state lamps.

In its response to questions 8 and 9 of the attached waiver petition, Cree states that ownership of its inventions made under this cooperative agreement will allow it to aggressively expand its business worldwide and to defend the United States' technology leadership. Cree asserts that its ability to establish an extensive intellectual property portfolio, via a grant of a waiver, will enhance competition among companies such as Hewlett-Packard, Gelcore, and Lumileds, its chief competitors. Therefore grant of the waiver is expected to have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12. This Patent Rights Waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Cree agrees to substantial U. S. manufacture of subject inventions (attached hereto). Additionally, Cree agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

¹ According to Cree's response to question 13 of its waiver petition, it intends to seek licenses to LBNL technology developed under this program.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

[REDACTED]
Mark P. Dvorscak
Assistant Chief Counsel
Office of Intellectual Property Law

Date: Feb. 20, 2001

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

[REDACTED]
Mark B. Ginsberg
Deputy Assistant Secretary
Building Technologies and State
And State and Community Programs
Office of Energy Efficiency and Renewable Energy

Date: 2-23-01

APPROVAL:

[REDACTED]
Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date: 2-23-01

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.